Claim Amendments

This listing of claims will replace all other versions, and listings, of claims of the above-identified application.

Listing of Claims

Claim 1 (Previously Presented): A water-soluble copolymer which consists essentially of, in copolymerized form,

(a) 60 to 99 % by weight of at least one monoethylenically unsaturated polyalkylene oxide monomer of the formula I

$$H_2C = CR^{\frac{1}{2}}X - Y - \left(-R^{\frac{2}{2}}O - \frac{1}{n}R^3\right)$$

wherein the variables have the following meanings:

X is
$$-CH_2$$
- or $-C(O)$ -, if Y is $-O$ -;
is $-C(O)$ -, if Y is $-NH$ -;
is $-O$ - or $-O$ - $(CH_2)_4$ -, if Y is a chemical bond;

Y is -O-, -NH- or a chemical bond;

R¹ is hydrogen or methyl;

 R^2 is C_2 - C_4 -alkylene radicals, which may be identical or different and also linear or branched, but where at least 50 % of the radicals R^2 are ethylene;

 R^3 is C_1 - C_4 -alkyl, phenyl, p- $(C_1$ - C_{12} -alkyl)phenyl or hydrogen;

n is an integer from 6 to 50;

(b) 1 to 40 % by weight of at least one nonquaternized dipolar monomer comprising at least one nitrogen atom and chosen from the group of N-vinylpyrrolidones, N-

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vinylimidazoles, N-vinylcaprolactams, vinylpyridines, N-vinylformamides, N-

vinylacetamides, basic (meth)acrylic esters and (meth)acrylamides;

(c) 0 to 39 % by weight of other nonionic monoethylenically unsaturated monomers; and

(d) 0 to 10 % by weight of other anionic monoethylenically unsaturated monomers;

and has an average molecular weight M_w of from 2000 to 500 000 D.

Claim 2 (Previously Presented): The copolymer according to claim 1, which comprises, in copolymerized form, as monomer (a), at least one monomer of the formula (I) in which the variables have the following meanings:

X is -C(O)-;

Y is -O- or -NH-;

R¹ is hydrogen or methyl;

R² is ethylene;

R³ is methyl or hydrogen; and

n is an integer from 15 to 25.

Claim 3 (Canceled):

Claim 4 (Previously Presented): The copolymer according to claim 1, which comprises, in copolymerized form, 90 to 95 % by weight of monomer (a), 5 to 15 % by weight of monomer (b), 0 to 15 % by weight of monomer (c) and 0 to 2.5 % by weight of monomer (d).

Claim 5 (Previously Presented): The copolymer according to claim 1, which has an average molecular weight $M_{\rm w}$ of from 4000 to 60 000 D.

Claim 6 (Previously Presented): Dispersants and sequestrants for pigmented materials comprising the copolymers according to claim 1.

Claim 7. (Previously Presented): The dispersants and sequestrants according to claim 6, wherein the pigmented materials are pigment-containing soiling.

Claim 8 (Previously Presented): An additive for detergents, laundry pretreatment agents, cleaning compositions for hard surfaces, dentifrices and bodycare compositions comprising the copolymers according to claim 1.

Claim 9 (Previously Presented): Auxiliaries for textile processing, paper making and paper processing and deinking processes comprising the copolymers according to claim 1.

Claim 10 (Canceled).

Claim 11 (Previously Presented): A liquid detergent formulation comprising:

- (A) 0.05 to 20 % by weight of at least one copolymer according to claim 1;
- (B) 0.5 to 40 % by weight of at least one nonionic, anionic and/or cationic surfactant;
 - (C) 0 to 20 % by weight of an inorganic builder;

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- (D) 0 to 10 % by weight of an organic cobuilder;
- (E) 0 to 60 % by weight of other ingredients, which comprise sodium carbonate, enzymes, perfumes, complexing agents, corrosion inhibitors, bleaches, bleach activators, bleach catalysts, color transfer inhibitors, graying inhibitors, soil release polyesters, fiber and color protection additives, silicones, dyes, bactericides, organic solvents, solubility promoters, hydrotropes, thickeners and/or alkanolamines; and
 - (F) 0 to 99.45 % by weight of water.

Claim 12 (Previously Presented): A solid detergent formulation comprising:

- (A) 0.05 to 10 % by weight of at least copolymer according to claim 1;
- (B) 0.5 to 40 % by weight of at least one nonionic, anionic and/or cationic surfactant;
 - (C) 0.5 to 50 % by weight of an inorganic builder;
 - (D) 0 to 10 % by weight of an organic cobuilder; and
- (E) 0 to 60 % by weight of other ingredients, which comprise extenders, enzymes, perfume, complexing agents, corrosion inhibitors, bleaches, bleach activators, bleach catalysts, color transfer inhibitors, graying inhibitors, soil release polyesters, fiber and color protection additives, silicones, dyes, bactericides, dissolution improvers and/or disintegrants, where the sum of components (A) to (E) is 100 % by weight.

Claim 13 (Currently Amended): A water-soluble copolymer, which comprises: in copolymerized form,

(a) 60 to 99 % by weight of at least one monoethylenically unsaturated polyalkylene oxide monomer of the formula I

$$H_2C = CR^{\frac{1}{2}} \times -Y + \left(-R^{\frac{2}{2}} - O + \frac{1}{2}R^3\right)$$

wherein the variables have the following meanings:

Y is -O-, -NH- or a chemical bond;

R¹ is hydrogen or methyl;

 R^2 is C_2 - C_4 -alkylene radicals, which may be identical or different and also linear or branched, but where at least 50 % of the radicals R^2 are ethylene;

 R^3 is C_1 - C_{22} -alkyl, phenyl, p- $(C_1$ - C_{12} -alkyl)phenyl or hydrogen;

n is an integer from 6 to 50;

- (b) 1 to 40 % by weight of at least one nonquaternized dipolar monomer comprising at least one nitrogen atom and chosen selected from the group of N-vinylpyrrolidones[[,]] and N-vinylimidazoles[[,]] N-vinyleaprolactams, vinylpyridines, N-vinylformamides, N-vinylacetamides, basic (meth)acrylic esters and (meth)acrylamides;
- (c) 0 to 39 % by weight of other nonionic monoethylenically unsaturated monomers; and
- (d) 0 to 10 % by weight of other anionic monoethylenically unsaturated monomers;

and has an average molecular weight M_w of from 2000 to 500 000 D.

Claim 14 (New): A water-soluble copolymer which consists essentially of, in copolymerized form,

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(a) 60 to 99 % by weight of at least one monoethylenically unsaturated polyalkylene oxide monomer of the formula I

$$H_2C = CR^{\frac{1}{2}}X - Y - \left(-R^{\frac{2}{2}}O - \frac{1}{n}R^3\right)$$

wherein the variables have the following meanings:

X is
$$-CH_2$$
- or $-C(O)$ -, if Y is $-O$ -;
is $-C(O)$ -, if Y is $-NH$ -;
is $-O$ - or $-O$ - $(CH_2)_4$ -, if Y is a chemical bond;

Y is -O-, -NH- or a chemical bond;

R¹ is hydrogen or methyl;

 R^2 is C_2 - C_4 -alkylene radicals, which may be identical or different and also linear or branched, but where at least 50 % of the radicals R^2 are ethylene;

 R^3 is C_1 - C_{22} -alkyl C_1 - C_4 -alkyl, phenyl, p- $(C_1$ - C_{12} -alkyl)phenyl or hydrogen;

n is an integer from 6 to 50;

- (b) 1 to 40 % by weight of at least one nonquaternized dipolar monomer comprising at least one nitrogen atom and chosen from the group of N-vinylpyrrolidones, N-vinylimidazoles, N-vinylcaprolactams, vinylpyridines, N-vinylformamides, N-vinylacetamides, basic (meth)acrylic esters and (meth)acrylamides;
- (c) 0 to 39 % by weight of other nonionic monoethylenically unsaturated monomers; and
- (d) 0 to 10 % by weight of other anionic monoethylenically unsaturated monomers;

and has an average molecular weight M_w of from 4000 to 60 000 D.